

BENCHMARKS

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NORTH TEXAS STATE UNIVERSITY

JAN/FEB 1984

*BENCHMARKS was produced using Waterloo/SCRIPT

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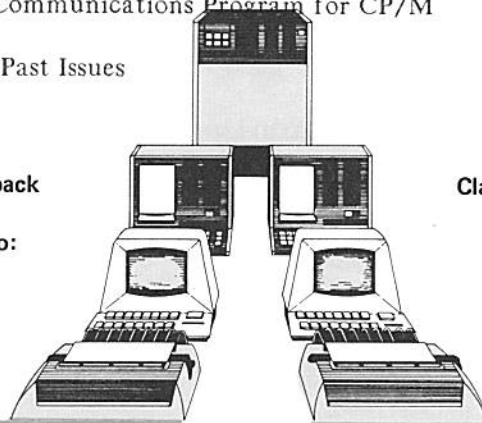
BENCHMARKS Reader/User feedback is encouraged.

Send all letters, suggestions, etc., to:
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The Computing Center
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Denton, Texas 76203

Claudia Putnam, BENCHMARKS Editor

Richard Harris,
Director of Computer Systems

Thomas Madron, Manager,
Academic Computing Services



Services Available To Users Of The NTSU Computing Facilities

The NTSU Computing Center is located in the Information Sciences Building, Room 119; Telephone (817) 565-2324.

INFORMATION AND ID CODES - Carolyn Goodman.

NEWSLETTER QUESTIONS/CONTRIBUTIONS/ETC. - Claudia Lynch.

STATISTICAL/RESEARCH SUPPORT (provided for graduate students and faculty members) - Bob Brookshire, George Morrow, Claudia Lynch, Steve Glick, and Victor Loos.

NON-RESEARCH STUDENT PROGRAMMING PROBLEMS - consultants from the Computer Science Department are located in GAB 550L. Student consulting provided by the College of Business is available at the BA Computing Access Facility.

JCL AND DEBUGGING PROBLEMS - George Morrow.

PRE-RESEARCH COUNSELING, INCLUDING SURVEY INSTRUMENT DESIGN - Bob Brookshire, George Morrow, Claudia Lynch, Steve Glick, and Victor Loos.

DATA ENTRY TO MUSIC, KEYPUNCH REQUESTS AND QUESTIONS REGARDING LAYOUT OF KEYPUNCH SHEETS - Betty Grise (ISB 227).

TEST SCORING AND ANALYSIS - Betty Grise.

ACADEMIC TIMESHARING INFORMATION AND/OR PROBLEMS: AS/8040, MUSIC (McGill University System for Interactive Computing) information and/or problems, including terminal problems - Steve Glick. VAX 11/780 information and/or problems - Kim Stickney. HP 2000 information and/or problems - Jeff Brooks.

ADMINISTRATIVE APPLICATIONS - Coy Hoggard.

AS/8040 COMPUTER HARDWARE/SOFTWARE/BILLING PROBLEMS - Sandy Franklin.

JOB SUBMISSION AND RETRIEVAL - RJE Operators.

Spring Computing Hours

Computing facilities will be open during the following times throughout the Spring semester (not applicable to holidays):

Computing Center RJE: 7 AM Monday - Midnight Saturday;
Noon-Midnight, Sunday.

ISB 110 Terminal Area: 7:30 AM-Midnight, Monday-Thursday;
7:30 AM-6 PM, Friday; 8:30 AM-7 PM
Saturday; 2-10 PM, Sunday

COB RJE (BA): 8:15 AM - Midnight, Monday-Saturday;
12:15 PM - Midnight, Sunday.

5th Floor GAB: 8 AM-Midnight, Monday-Thursday; 8 AM -
10 PM, Friday; Noon-8 PM Saturday; CLOSED
February 4, March 11 & 24, and May 26.

CONSULTING SERVICES AVAILABLE TO STUDENT PROGRAMMERS

The Computing Center offers research and statistical programming consultation to graduate students and faculty members, and will provide JCL and debugging help on a limited basis to anyone who needs it. The type of help often needed by Computer and Information Science undergraduate students, however, must be sought elsewhere.

The Computer Science Department hires student consultants who are on duty in GAB 550L. Their primary function is to help students in CSCI classes 110, 111, and 201, and consulting for those classes is available at any time a consultant is on duty. Consulting for other classes and/or problems is available on a more limited basis. When there are people waiting, consulting time is limited to 5-10 minutes per student. The consulting hours for this semester are as follows.

Monday	9-11 AM, Noon-2 PM, 3-8 PM
Tuesday	10 AM-3:30 PM, 5-6 PM, 7-10 PM
Wednesday	9-10 AM, Noon-2 PM, 3-6 PM
Thursday	9 AM-3:30 PM, 4-8 PM
Friday	9-10 AM, Noon-2 PM, 3-5 PM, 6-7 PM
Saturday	4-7 PM
Sunday	6-7 PM

The following consulting hours have been designated for the special topic(s) indicated.

SUNDAY

- 6-7 PM: MUSIC, VAX, COBOL

MONDAY

- 9-10 AM: MUSIC, TI990, FORTRAN, SNOBOL, COBOL
- 10-11 AM: MUSIC, TI990, JCL, FORTRAN, PL/I, COBOL
- Noon-1 PM: MUSIC, TI990
- 1-2 PM: MUSIC, VAX
- 3-6 PM: MUSIC, TI990, FORTRAN, PL/I, COBOL
- 6-8 PM: MUSIC, TI990, FORTRAN, SNOBOL, COBOL

TUESDAY

- 10 AM-Noon: MUSIC, VAX
- Noon-1:30 PM: MUSIC, VAX, JCL, FORTRAN, PL/I, COBOL
- 1:30-3:30 PM: VAX, TI990, PL/I
- 5-6 PM: MUSIC, VAX, COBOL
- 7-10 PM: MUSIC, VAX

WEDNESDAY

- 9-10 AM: MUSIC, TI990, FORTRAN, SNOBOL, COBOL
- Noon-1 PM: MUSIC, TI990
- 1-2 PM: MUSIC, VAX
- 3-4 PM: MUSIC, TI990, FORTRAN, PL/I, COBOL
- 4-6 PM: MUSIC, TI990, JCL, FORTRAN, PL/I, COBOL

THURSDAY

- 9-11 AM: MUSIC, VAX, JCL, FORTRAN, PL/I, COBOL
- 11 AM-2 PM: MUSIC, VAX, COBOL
- 2-3:30 PM: MUSIC, VAX, FORTRAN, PL/I, COBOL
- 4-5 PM: MUSIC, TI990, FORTRAN, PL/I, COBOL

3 5-7 PM: MUSIC, VAX
3 7-8 PM: VAX, TI990, PL/I

FRIDAY

3 9-10 AM: MUSIC, TI990, FORTRAN, SNOBOL, COBOL
3 Noon-2 PM: MUSIC, VAX
3 3-5 PM: VAX, TI990, PL/I
3 6-7 PM: MUSIC, TI990

SATURDAY

3 4-7 PM: MUSIC, VAX

No consultants are scheduled during Spring Break or finals week. Any questions regarding the Computer Science consultants should be directed to Susan Rulon, Microcomputer Lab Director, GAB 330A, ext. 2810.

The College of Business Computing Center is divided into three areas, the Microcomputer Lab, the Minicomputer Lab, and the Remote Job Entry (RJE) area that was operated by the Computing Center in the past. According to Cengiz Capan, Manager of the College of Business Computing Center, there is at least one student consultant stationed in each area at all times. Their duties, in order of priority, are:

1. To monitor the area, schedule terminal time, etc.
2. To help students with problems with things such as logging-on.
3. To consult with students on programming problems. This service has the lowest priority, and will only be offered if the consultant has completed the above mentioned duties. An exception to this is in the Microcomputer Lab, where there are two consultants, one to help with programming problems, the other to take care of the "housekeeping."

The Operations section of the Computing Center provides the following services at its Remote Job Entry Station, located in the Information Sciences Building (Room 134).*

1. Distribution of output routed to RMT3, or LASER printer.
2. Information on individual job processing status.
3. Job submission: instructing new users in operation of the RJE card reader, and ascertaining validity of the JOB card.
4. Basic guidance in the use of the keypunch machine.
5. Running 80/80 listings.

*Sample JCL setups for the most frequently used languages, and manuals for all current languages, user guides, and a collection of BENCHMARKS are available for reference in Science and Technology Library.

COMPUTING CENTER SHORT COURSES: SPRING 1984

The Computing Center is offering a series of short courses during the months of February and March. These courses will be held in room 110 of the Science and Technology Library (ISB) unless otherwise noted. Following are the dates, times and lists of requirements for each course. You must pre-register to attend and only 20 people will be admitted per session.

1. Ten separate 2 hour introductory sessions on the McGill University System for Interactive Computing (MUSIC). This is the operating system used by most academic users of the NAS/8040 computer to do text processing and build job streams to be submitted to and run on the OS/MVS batch operating system. PURCHASE OF A MUSIC MANUAL WOULD BE HELPFUL. These are available in the University Store.

Monday, February 6, 2-4 PM. Instructor: Steve Glick
Tuesday, February 7, 3-5 PM. Instructor: Jeff Brooks
Wednesday, February 8, 6:30-8:30 PM. Instructor: Claudia Lynch
Thursday, February 9, 10 AM-12 NOON. Instructor: Victor Loos
Friday, February 10, 10 AM-12 NOON. Instructor: Bob Brookshire

Monday, February 27, 2-4 PM. Instructor: Steve Glick
Tuesday, February 28, 3-5 PM. Instructor: Jeff Brooks
Wednesday, February 29, 6-8 PM. Instructor: Claudia Lynch
Thursday, March 1, 10 AM - 12 NOON. Instructor: Victor Loos
Friday, March 2, 10 AM - 12 NOON. Instructor: Bob Brookshire

2. Six separate 1 hour sessions on the use of the 3270 Protocol Converter to do full screen editing on MUSIC.*

Monday, February 13, 11 AM - 12 NOON. Instructor: Bob Brookshire
Tuesday, February 14, 3-4 PM. Instructor: Jeff Brooks
Thursday, February 16, 2-3 PM. Instructor: Steve Glick

Monday, March 5, 11 AM - 12 NOON. Instructor: Bob Brookshire
Tuesday, March 6, 3-4 PM. Instructor: Jeff Brooks
Thursday, March 8, 2-3 PM. Instructor: Steve Glick

3. Two separate 1 hour introductory sessions on the RUNOFF text processing system on the VAX minicomputers.**

Wednesday, February 15, 1-2 PM. Instructor: Kim Stickney

Friday, March 9, 1-2 PM. Instructor: Kim Stickney

4. Two separate 1 hour introductory sessions on DIGITAL Command Language (DCL) on the VAX minicomputers.**

Friday, February 17, 1-2 PM. Instructor: Kim Stickney

Wednesday, March 7, 1-2 PM. Instructor: Kim Stickney

5. Two separate 2 hour introductory sessions to SPSS-X, a statistical package used to do data analysis.*

Monday, February 20 (GAB 301)/

Wednesday, February 22 (ISB 110), 11 AM-12 NOON. Instructor: Victor Loos

Tuesday, March 13 (GAB 301)/

Thursday, March 15 (ISB 110), 11-12 NOON. Instructor: Victor Loos

6. Two separate 2 hour advanced sessions on the use of WATERLOO/Script for theses and dissertations. A WORKING KNOWLEDGE OF WATERLOO/SCRIPT IS REQUIRED.

Monday, February 20 (GAB 301), 6-8 PM. Instructor: Claudia Lynch

Wednesday, March 14 (GAB 301), 6-8 PM. Instructor: Claudia Lynch

7. Two separate 2 hour introductory sessions to WATERLOO/Script, a text processing system available on the NAS/8040 computer.*

Tuesday, February 21 (GAB 301)/

Thursday, February 23 (ISB 110), 10-11 AM. Instructor: Victor Loos

Wednesday, March 14 (GAB 301)/

Friday, March 16 (ISB 110), 10-11 AM. Instructor: Victor Loos

8. Two separate 2 hour introductory sessions to SAS, a statistical package used to do data analysis.*

Wednesday, February 22 (GAB 301)/

Friday, February 24 (ISB 110), 10-11 AM. Instructor: Claudia Lynch

Tuesday, March 13 (GAB 301)/

Thursday, March 15 (ISB 110), 10-11 AM. Instructor: Claudia Lynch

9. Two separate 2 hour advanced sessions on SAS. A WORKING KNOWLEDGE OF SAS IS REQUIRED.

Wednesday, February 22 (GAB 301), 6-8 PM. Instructor: Claudia Lynch

Monday, March 12 (GAB 301), 2-4 PM. Instructor: Claudia Lynch

Since the size of these classes is limited, it might not be feasible to bring an entire class to one of them. If you would like a short course to be presented to your class, contact Academic Computing Services, 565-2324.

*WORKING KNOWLEDGE OF THE MUSIC EDITOR REQUIRED - MAY BE GAINED FROM A SHORT COURSE AND/OR THE MUSIC COMPUTER ASSISTED INSTRUCTION (CAI) COURSES "LEARN" AND "TEACH."

**WORKING KNOWLEDGE OF THE VAX EDITOR AND VMS OPERATING SYSTEM REQUIRED - MAY BE GAINED BY DOING THE "EDTCAI" AND "VMSCAI" COMPUTER ASSISTED INSTRUCTION MODULES ON THE VAX.

COMPUTER SYSTEMS MONTHLY REPORT: DECEMBER 1983

The following items were taken from a monthly report that is submitted to the Vice President of Fiscal Affairs. This is NOT a copy of that report. The items listed are those that were deemed to be of interest to the general user community.

General

- Tom Madron and Richard Harris attended the Association for Higher Education (AHE) Local Area Networking (LAN) Seminar at the University of Texas Health Science Center in Dallas. Dr. Madron presented a review of the NTSU Local Area Network.

COMPUTER SERVICES GROUP

ACADEMIC COMPUTING SERVICES:

- Search is continuing for Academic Services Manager.
- Work continues on the updating and expanding of the NTSU Computer User's Guide.
- Several Local Area Network system problems continue to be active. Checking LAN outlets, resolution of HP-network problem, helping the users in the use of the local area network continues.
- The November/December issue of BENCHMARKS was distributed giving the up-to-date changes occurring in the Computing Center.
- A new release of the academic timeshare system, MUSIC 5.2, was installed for testing.
- Development of reference cards for the VAX computer systems was completed the end of November.
- Programs were developed to allow files to be transferred from the Music Department Sunclavier computer to the VAX minicomputer.
- A revised Computing Center brochure showing the new equipment recently purchased was produced and is ready for distribution to users needing to know about general procedures of the NTSU Computing Center.
- Testing was completed during the month of December on current academic software packages running under the test MVS operating system.
- Installation of the PDP 11/24 donated minicomputer was completed on December 15. It is located in the VAX computer room and will be used to monitor and control the Local Area Network.
- Operators/consultants for the VAX computer were interviewed during December.

Technical Support:

- Installation of the NAS 6650 computer was completed on November 11, 1983. The 6650 computer was placed in production for SIMS system and MVS operating system development.
- Transfer of all administrative applications from 8040 to 6650 computer and cutover to MVS on 8040 completed over Christmas Break.
- Search is continuing for three vacant technical support programmer/analyst positions. Two part-time data communications positions filled.
- Finalized implementation plans of new ID code structure across all systems. Production to begin in January.
- Disk naming conventions defined with final approval concurrent with ID code structure approval.
- Disk security conventions defined and implemented on the MVS operating system (as opposed to the old MVT operating system) with actual implementation planned to occur in January or early February.
- The installation of eight additional bisynchronous lines on the Memorex 1270 communications control unit for use by remote 3270 terminals, Remote Job Entry stations, and protocol converters was completed Dec. 22, 1983.
- The Memorex 1270 communications control units were reconfigured for switching some bisynchronous and asynchronous lines to the NAS 6650. Completed on November 15, 1983.
- Manuals were ordered and received for placement in the College of Business and Computer Science departments to provide documentation for our switch of operating systems from MVT to MVS.
- Application support programs for the new ID Code structure were installed on December 19, 1983.
- The movement of 3270 terminal cables on the 3272 terminal control units was accomplished during the Christmas break to assure that all cables ended up attached to the proper computer (8040 vs 6650).
- Additional communications and network tasks included installing backlevel firmware in the Network boxes, installing various network boxes and protocol converters, reconfiguring the Memorex 1270 ports, installing terminals in various locations, locating and repairing/replacing failed equipment, etc.
- All public access terminals and network boxes in the College of Business were reinstalled.

OPERATIONS:

- The AS/8040 computer system uptime was 97.6% in December. Planned downtimes were scheduled for discontinuing the OS/MVT/HASP operating system, installing the OS/MVS/JES2 operating system. Unplan-

ned downtime was primarily due to IBM 3272 terminal control unit failures.

- The OS/MVS/JES2 operating system installation was successfully completed on schedule and was operational on both the AS/6650 and the AS/8040 on January 1 with minimum conversion problems encountered.
- All computer operator personnel had completed an OS/MVS/JES2 programmed operator's self-study training course by December.

DATA ENTRY:

- The Data Entry Supervisor was given the responsibility of supervising the Operations Data Control Section to provide improved coordination and control.

SECRETARIAL SERVICES:

- Meetings were attended regarding the impact of the new ID code system to be instigated in January 1984. The initial impact will be greatest on the secretarial staff who are the initial contact for ID Codes. Help was given in design of form and in helping those writing the program understand the existing system.

INFORMATION SYSTEMS GROUP SIMS (STUDENT INFORMATION MANAGEMENT SYSTEM) TEAM :

- Conversion of the SRS (Student Records System) modules to ADABAS / COM-LETE HAS BEEN ACCOMPLISHED BY ARTHUR F. TODD & ASSOCIATES, sub-contractor to Information Associates, Inc. Quality assurance testing by Information Associates has been completed, and the SRS module has been turned over to NTSU for testing.
- Conversion of the BRS (Billing / Receivables System) modules ADABAS / COM-LETE has been accomplished by AFT & Associates. Quality assurance testing by IAI is scheduled for January, 1984. NTSU testing of this component of the system will begin after IAI's testing is completed.
- Demonstration of sample equipment that will be feasible for use in accessing the SIMS software system has been accomplished.

DATA BASE / DATA COMMUNICATIONS TEAM :

- Received, sorted, distributed new MVS operating system manuals, acting as distribution center for IBM manuals for the entire Computing Center.
- Assisted Technical Support group in conversion to MVS operating system.
- Completed programming of on-line portion of new userid system which will allow the users to access all of the major centrally-controlled computers and operating systems with a single user id.

OFFICE AUTOMATION TEAM :

- Vacant office automation positions offered to top two choices of search committee and at least one is expected to accept in January.*

FISCAL / ADMINISTRATIVE DATA SYSTEMS TEAM:

- One vacant programmer/analyst position filled in December and remaining analyst position scheduled to be filled in January. Vacant programmer position to be filled in January or February.
- For Controller's Office: Set up and ran special reports for State Auditors (12 jobs). Isolated and corrected errors in Add- Drop fee program.
- For Payroll Office: Changed programs for calculation of state-paid FICA (calculate FICA deduction on FICA contribution). Ran preliminary W-2 reports for Payroll review. Made program modifications necessary to handle child support deductions as required by new state law. Ran jobs to close out payroll for the 1983 calendar year.
- For Personnel Office: Changed insurance premium calculation program to calculate HMO (Health Maintenance Option) deduction and redistribute state payment.
- For TCOM: Made tape copies of Employee Master, Position Master, and Daily Balance Files to use on their (TCOM) computer system. Made same modifications to Payroll / Personnel System as shown above for NTSU.
- Other: Serviced the following additional special requests: 14 miscellaneous "special" reports. 11 requests for faculty / staff mailing labels.

GENERAL DATA SYSTEMS TEAM :

- Continued system design, coordinated and assisted in programming effort for new OCR (Office of Civil Rights) series of reports required by the federal Office of Civil Rights.
- Set up registration procedures for Financial Aid and Housing systems in preparation for Spring registration.

STUDENT RECORDS DATA SYSTEMS TEAM :

- Vacant programmer analyst and data control positions should be filled in January.
- Provided programming support for OCR (Office of Civil Rights) reporting series.
- Tested modifications to grade reporting system to reinstate grade of WF.
- Ran Fall grade reporting.

● Prepared Spring '84 registration materials.

*Office Automation Analyst, Paul Buchannan, began work on February 1, 1984.

Manager of Computer Services Becomes COMPUTERWORLD Columnist

Thomas Wm. Madron, Ph.D., Manager of Computer Services here at NTSU has become a regular contributor to COMPUTERWORLD, "The Newsweekly for the Computer Community." His debut article, "Communications Lacking in Micros," appeared in the January 16, 1984 issue. Watch COMPUTERWORLD for more exciting news about microcomputers and communications from Dr. Madron. His articles are scheduled to appear approximately every two weeks.

MISSING A TAPE?

The Computing Center has come into possession of a tape, marked "Kana-wha County Schools," whose owner is unknown. Anyone wishing to claim it may do so by appearing in Room 224 ISB and identifying the tape.

PUBLIC IDS STILL AVAILABLE

Although some changes have taken place between semesters with regard to computing facilities, one thing remains the same, we still have public ID codes. These ID codes, available on MUSIC, the HP 2000, and the VAX Systems A and B, allow you to "explore" the facilities of each system without having your own personal ID.

- The ID code on MUSIC is LA00. It does not require a password
- The ID code on the HP 2000 is A098 and the password is PGREEN
- The ID code on the VAXs is TEST and the password is TEST

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*           A N D
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*   P R O C E D U R E S
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No More Punched Output

Now that Administrative and Academic computer users are no longer sharing computers, the ability to generate punched output is not available to users of the academic IBM compatible computer, the NAS/8040. THIS DOES NOT MEAN that the Data Entry Department has stopped punching cards from key-punch worksheets or questionnaires. THIS DOES MEAN that there is no longer a card punch attached to the NAS/8040.

Actually, the removal of the card punch should not be an inconvenience to anyone, since you can still punch card-image files to MUSIC, disk, or tape. Contact Academic Computing Services(565-2324) if you think you absolutely must generate an actual card deck from your program(s).

New Procedure for Secure Output

Under the new MVS operating system, the only way to indicate that you want your output to be filed in the "SECURE" section of the RJE station is to code the word "SECURE" as the first 6 characters of the name field in your job card. For example:

```
//JOBNAME JOB (MYID,1,1),SECURE--MY NAME,PASSWORD=SECRET
```

Printer Copy Policy

The Computing Council, on January 26, 1984, passed a tentative operating policy with regard to the use of the Hewlett-Packard Laser Printer. This policy was recommended in an effort to encourage efficient use of the laser printer, and limits the number of copies requested to four (4). Exceptions to this policy must be approved in advance by the Director of Computer Systems or his authorized representative. Violations will be reported to the appropriate vice president.

In a related effort to relieve needless backup on all the printers connected to the NAS/8040, the Computing Center has implemented a policy that limits the number of copies requested, no matter to what printer the output is routed, to four (4).

Changes to the Resource Access Control Facility (RACF) at NT

Those of you running batch jobs will notice, as the second line of your batch output, a new message which lists the number of days which will pass before your batch password 'expires'. When your password 'expires' you may still submit a job, but you must change your batch password on the jobcard or the job will not run. This is accomplished by entering both your old password and the new password you are creating in the PASSWORD= field of the jobcard:

```
//JOBNAME JOB (IDID,:05,1),NAME,PASSWORD=(oldpw,newpw)
```

It is a good practice to change your password before it expires. You have the option of setting your own password change interval from 1 to 180 days. If you don't feel that the security of your OS/MVS batch resources is critical, then an expiration interval of 180 days might be satisfactory. If, on the other hand, a high level of security (via frequent password changes) is important to you, you should select a shorter interval, perhaps 15-30 days. In the near future, RACF will also protect your OS datasets, in addition to controlling your OS/MVS access.

The following JCL setup will change your password interval:

```
//MYID JOB (MYID,:05,1),MYNAME,PASSWORD=MYPASS
// EXEC CHANGEPW
//SYSIN DD *
PASSWORD INTERVAL(180)
```

The above job would change my password change interval to 180 days. All ID codes which were assigned prior to February 1, 1984 have a change interval of 30 days, so this means many of you may wish to change your interval.

When your password is within 30 days of expiration, a warning note will print on the first page of your batch output, so be aware of this.

A procedure will be available on MUSIC which will make the changing of both your OS/MVS Password and the Password Interval relatively painless. The procedure can be invoked by typing CHANGEPW from the *GO mode of MUSIC. The scheduled availability date for this procedure is February 15, 1984.

ONE FINAL NOTE ON PASSWORDS: Remember that your BATCH and MUSIC passwords are totally independent of one another. Although you might choose to make the two passwords the same, you could certainly make them different. For information on changing your OS/MVS password, type HELP MVS from the *GO mode of MUSIC.

VSAM Comes to NTSU

Implementation of MVS/SP 1.3 as the batch operating system on the 8040 allows users to that system to take advantage of IBM's Virtual Storage Access Method (VSAM). Use of VSAM requires some special user care and effort as described below.

VSAM datasets are created and deleted by use of the IBM Access Methods Services utility IDCAMS. VSAM datasets must be cataloged in a VSAM catalog. On our system, VSAM datasets will automatically be cataloged in a VSAM user catalog.

On the 8040, all user VSAM datasets must follow the naming convention given below. They must reside on an ACADxx pack. Users may create their own VSAM objects on these packs using IDCAMS. VSAM objects not meeting these requirements will be scratched without backup.

The naming convention is:

USRV.userid.name

where USRV is the required high level index name
userid is the userid of the user creating the dataset
name is further qualifiers chosen by the user.

New Disk Mapping Utility

MINIMAP, the utility that was previously used to map disk packs, is incompatible with the MVS operating system and has been replaced by a utility called MAPDISK. This new utility will map only those data sets which follow the current naming convention (enter HELP MVS while logged on to MUSIC for more information on the data set naming convention).

To execute the MAPDISK utility, enter the command MAPDISK from *GO mode on MUSIC. If you want a further description of this utility, you may enter HELP MAPDISK while in *GO mode. If you need help finding the names of your existing data sets, you may call Academic Computing Services, 565-2324.

DIABLO Moved to Matthews Hall

The DIABLO printing terminal that was in the Computing Center RJE area has been moved to room 349 in Matthews Hall. It will be available from 8 AM - 5 PM, Monday through Friday, and reservations can be made by calling 565-4113.


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*   O P E R A T I O N S   *
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Backup Schedule for OS/MVT

OS/MVT disk packs (Academic and Administrative) are backed up daily, Tuesday through Saturday, from 4-6:30 AM, and Sunday from Midnight to 3 AM. A backup of all the operating systems and their contents is done once every two weeks at some low activity period over the weekend.

After-hours Assistance With Terminal and Network Problems

Please remember that the Computing Center does not have personnel available who are designated to assist users with terminal and/or network problems on weekends or after 5 p.m. on weekdays. If you encounter problems after 5 p.m. on weekdays, or during weekends or holidays that you are unable to resolve yourself with the aid of documentation provided by the Computing Center, then you may call the ISB Input/Output station at 565-2324 and provide the following information to the I/O operator on duty:

- YOUR NAME
- YOUR ID CODE
- TERMINAL TYPE
- ON or OFF-CAMPUS? (if ON CAMPUS, include department, building and room number of terminal)
- DIAL-UP OR DIRECT LINE?
- SHORT DESCRIPTION OF THE PROBLEM

Please provide the above as briefly as possible. I/O Operators have many duties which may require their immediate attention, and they are not free to personally assist you with terminal or network problems.

The I/O Operator will record the information you provide and pass it on to the proper staff member on the next regular working day. Your cooperation is appreciated.

The Laser Printer and Overridden SYSOUT DD Cards*

When a job has two different SYSOUT Classes, usually when you specify an "Environment File" for the Laser Printer, you should be aware that you will get two separate listings, one for each SYSOUT Class. This should not be a problem, but be sure to pick up BOTH sets of output.

*The Sept/Oct 1983 issue of BENCHMARKS contained an article, "Using the Hewlett-Packard 2680A Laser Printer," which you may want to read for more information on this topic.

LASER Not Always the Best Choice

Currently, the default printer destination for the printed output of jobs routed from MUSIC to a high speed printer is the HP3000 Laser Printer. Because of this there is frequently quite a backlog of jobs waiting to print on the Laser Printer, while the other printers stand idle. The questions one must ask themselves then, are: "How much do I really need that shiny white paper?" and "Do I need a fancy print environment?." If the answers are "Not Much" and "No," then you would probably be better off routing your job to one of the impact printers, 'REMOTE3' or 'BA'.

MVS and RACF

The last issue of BENCHMARKS announced the migration from the OS/MVT operating system to the OS/MVS operating system. This migration has indeed taken place, as you are all probably aware. If you are unclear as to what effect these changes might have on you, you might want to enter HELP MVS while you are logged-on to MUSIC for further information. Please note the simplification of the procedure to change your password. You can now accomplish this task in the "PASSWORD=" parameter of the JOB card:

```
//JOBNAME JOB (IDID,:05,1),NAME,PASSWORD=(oldpw,newpw)
```

There is a time limit on the effectiveness of passwords, and you are advised on your printout(s) how many days you have left on your current password (see the related article, "Changes to the Access Control Facility (RACF) at NT," in this issue).

AS/8040 Performance Statistics for November, December

November Performance Summary*

System Type	Operating Hours Scheduled (OHS)	Maintenance Hours Planned (MHP)	Production Hours Planned (PHP)	Maintenance Hours Unplanned (MHU)	Actual Production Hours (APH)	System Uptime (SU)
VM/SP	720	2.97	717.03	7.66	709.37	98.9%
MUSIC	720	25.63	694.37	11.39	682.98	98.4%
OS/MVT	720	3.16	716.84	24.49	692.35	96.6%
COMPLETE	237	0.00	237.00	6.38	230.62	97.3%
ADABAS	237	0.00	237.00	6.59	230.41	97.2%

Lost Productivity Hours can be contributed to the following key causes*:

CPU, Tape, and Disk Subsystem (NAS)

1. Cable DASD From AS/8040 to AS/6650	2.66 Hours
2. Replace Floppy Reader in CPU	2.47 Hours
3. Replace Channel Card in IOP	1.88 Hours
2. 7835 DASD C.U. Failures	14.22 Hours
TOTAL	21.23 Hours

Terminal Control Systems (MEMOREX)

1. 1270 TCU Malfunctions	0.99 Hours
--------------------------	------------

Miscellaneous

1. Undetermined Causes for System Restarts	5.37 Hours
2. MVT Job Scheduler Failure	0.38 Hours
3. Cable Unit Record I/O to AS/6650	0.50 Hours
TOTAL	6.25 Hours
GRAND TOTAL	28.47 Hours

December Performance Summary*

System Type	Operating Hours Scheduled (OHS)	Maintenance Hours Planned (MHP)	Production Hours Planned (PHP)	Maintenance Hours Unplanned (MHU)	Actual Production Hours (APH)	System Uptime (SU)
VM/SP	744	26.28	717.12	3.18	714.54	98.6%
MUSIC	744	47.94	696.06	7.70	688.36	98.9%
OS/MVT	744	27.50	716.50	17.30	699.20	97.6%
COMPLETE	241	1.43	239.57	9.21	230.36	96.2%
ADABAS	241	1.43	239.57	9.58	229.99	96.0%

Lost Productivity Hours can be contributed to the following key causes*:

CPU, Tape, and Disk Subsystem (NAS)

1. Quarterly Periodic Maintenance on CPU	5.65 Hours
2. 7835 DASD C.U. Failures	3.83 Hours
TOTAL	9.48 Hours

Unit Record and 3279 Terminal Equipment (IBM)

1. 3505 Card Reader Malfunctions	0.80 Hours
2. 3272 Terminal C.U. Failures	9.84 Hours
TOTAL	10.64

Terminal Control Systems (MEMOREX)

1. 1270 TCU Malfunctions	1.25 Hours
--------------------------	------------

Miscellaneous

1. Undetermined Causes for System Restarts	5.71 Hours
2. Increase VM/SP2 Queue Size	0.62 Hours
3. Reconfigure Cabling for 3270 Terminals	1.37 Hours
4. MVS/JES2 Conversion	20.48 Hours
TOTAL	28.18 Hours
GRAND TOTAL	49.55 Hours

*NOTE 1: CPU availability will be approximately equal to VM's % Uptime.

*NOTE 2: SU = APH/PHP

*NOTE 3: APH = PHP - MHU

*NOTE 4: PHP = OHS - MHP

*NOTE 5: OHS = PHP + MHP

*NOTE 6: MUSIC's PLANNED MAINTENANCE HOURS includes 22.51 hours of system backup time in November and 21.24 hours of system backup time in December.

*Lost productivity is calculated on the greatest amount of elapsed time that any one of the production systems was unavailable for scheduled operation.

```

* * * * *
*
*       M U S I C
*
* * * * *

```

TO CALL MUSIC, DIAL: 565-3499;3989;3999;4025;4030 and enter either CALL 8040 or CALL 8300 (depending whether you want 1200 or 300 BAUD communication) at the # prompt.

MUSIC Backup Hours

Following are the scheduled hours for the MUSIC backup. A message will be sent to all users signed-on to MUSIC approximately 10 minutes before the backups are begun, and will be in the form:
 ** MUSIC SHUT DOWN AT xxxxx AM - SCHEDULED BACKUP ** To find out the backup hours while signed-on to MUSIC, enter HELP HOURS

MUSIC Backup Hours

Tuesday	3 AM (for about 3 hours)	Weekly Backup
Wednesday-Saturday	4 AM (for about 2 hours)	Daily Backup
Saturday	Midnight (for about 2 hours)	Daily Backup

OPER Help File Temporarily Off-Line

The OPER Help file on MUSIC that is normally available to give you valuable assistance on many different topics concerning "How Things Work" has been taken off-line temporarily. This was done so that it could be updated to reflect the changes in operating systems and procedures that occurred during the semester break. This Help file should become available again in the very near future, bringing with it the most up-to-date and noteworthy information concerning operational procedures within the Computing Center available anywhere.

```

* * * * *
*
*   V A X 1 1 / 7 8 0s
*
* * * * *

```

TO CALL THE VAXs, DIAL: 565-4030 and enter either CALL A780 or CALL B780, (depending on which system you want) at the # prompt.

VAX Backup Schedule

Incremental backups of both VAX systems are performed Monday through Thursday at 5 PM. Any files that have been created or changed are backed up. Users do not have to log out, but any files that are open at the time of the backup will NOT be backed up.

Full backups of both systems are done every Friday at 5 PM. Again, users do not have to log out, but any files that are open will not be backed up.

A "stand alone" backup of both systems is done on the last working day of the month. During this time, all system software, as well as user files, are backed up. The systems must be taken down for this backup, which usually will not last more than 1/2 hour. All users that are logged on will be warned of the impending backup, and must log out.

NOTE: No backups are taken on the weekends. Requests for restoration of files should be made via MAIL to the username OP00.

```

* * * * *
*
*   H P - 2 0 0 0
*
* * * * *

```

TO CALL THE HP, DIAL: 565-3300;3900;3899;3966 and enter CALL 2000 at the # prompt.

HP 2000 Backup Schedule

Routine system backups are scheduled to be performed at the following times;

8:00 a.m. Monday through Friday for approximately 20 minutes.
4:00 p.m. Friday for approximately 1.5 hours.


```

* * * * *
*           *
*   M I C R O S   *
*           *
* * * * *

```

CP/M Users Group Forming

A CP/M users group is being started and had its first meeting Wednesday, February 1. If you are interested in joining this group and/or want further information, contact Dr. Chuck Adams, Computer Sciences Department, ext. 2821.

MUSIC Communications Program for CP/M* by C. N. Adams, Ph.D. Department of Computer Sciences

A program called MUSIC.BAS is available as a public file on MUSIC. It, along with this documentation, will appear, at some point in the future, in the MICROLIB on MUSIC (LIST MICROLIB.DOC while logged-on to MUSIC for further information on this library).

The MUSIC.BAS program is written in MICROSOFT BASIC and functions presently in three modes. It allows you to use your CP/M based system with a modem to use the system to:**

1. Act as a dumb terminal
2. Transfer files from MUSIC to CP/M disk
3. Transfer text files from CP/M to MUSIC.

I am presently running the program on a Xerox 820 system with 8" drives, thus there exist some things that you may have to modify to work with your system. I would be interested in any work that you do so that others may benefit from this master work. My system uses the ZILOG SIO chip for serial communications. If your system uses something different, then adjust appropriately.

I will come up with another version to work on VAX systems also. This will give us the capability to use the PC's for transferring files between systems, i.e, the VAX & MUSIC, CP/M to CP/M, etc. . More as this develops ...

**** OPERATION ****

The system comes up in the dumb terminal mode. Some control characters generated (The only one so far that I have seen is a hex 7F generates the TM critter on the XEROX or BIGBOARD) may display on your screen. If this is all you need then you may send any keyboard sequence except CNTL-A or CNTL-B.

**** File Transfer from CP/M to MUSIC ****

While in the dumb terminal mode get EDIT or TEDIT to startup in MUSIC. Remember to use TEDIT if the CP/M file has lower case characters. Also, if the CP/M file has blank lines, then set up some delimiter sequence, I use .. as a delimiter (this is documented in the MUSIC Manual). Now enter CNTL-A. This will get the BASIC program into the file transfer mode and prompt you for the file name. Be sure to use UPPER CASE for the name and use all qualifiers for the name, i.e. TC.ASM is asm text, etc. (DO NOT attempt the transfer of .COM files !!!). The program will now start disk access and transfer one line at a time to MUSIC. Note that some characters may not show up on the screen. Don't worry about it. After the file is transferred, the program will prompt with the question

APPEND FILE TO OTHER TRANSMITTED?

You may answer yes, then you will get prompted for filename, and the new filename will be appended to last transmission and may be continued. If you answer NO, then the program will return to dumb mode.* **NOTE** the MUSIC editor is still active in input mode. This allows you to add lines, or terminate input and save file under whatever name you want. GOT IT ? GOOD.

**** MUSIC TO CP/M FILE TRANSFER ****

While in the dumb terminal mode, do an EDIT or TEDIT and give the name of the file you wish to transfer to CP/M disk. If you are already in an editor, then place the current line pointer at the top of the file. Now depress a CNTL-B. The program will prompt for a filename to use to place the file on the CP/M disk (I use a name with no qualifiers because of the way MICROSOFT seems to bomb on weird file type qualifiers). The program goes until an "*EOF" is received to a NEXT ("n") command sent to the editor by the program.

**** PROBLEMS ****

If during the execution of the program a problem occurs, just remember it is a dumb BASIC routine and may be interrupted with a CNTL-C. Restarting it will put you back in the dumb terminal mode and close the open file. It does not log you off the LAN (maybe you might get lucky and the error already got you off) and you should be able to restart (with some housecleaning). Don't call me, I'll call you. HA. If you do have trouble let me know. My MUSIC ID is FA03 if you want to send mail. Let me know if you have a copy of this program and your ID(s) if you want messages on updates, problems, etc. .

*Trademark of Digital Research of California

** NOTE: In order to use this program, you must have it on your micro, thus you have to download it or key it in from a listing. Also, in case you didn't know, CNTL- means that you depress the CNTRL key and whatever other key is indicated at the same time.

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REGISTRATION FORM FOR COMPUTING CENTER SHORT COURSES

Please complete this form and return it AS SOON AS POSSIBLE if you wish to attend any of the short courses listed below.

NAME : _____ PHONE: _____

DEPARTMENT: _____

I WISH TO ATTEND :

INTRODUCTION TO MUSIC:

_____ Monday, February 6, 2-4 PM	_____ Monday, February 27, 2-4 PM
_____ Tuesday, February 7, 3-5 PM	_____ Tuesday, February 28, 3-5 PM
_____ Wednesday, February 8, 6:30-8:30 PM	_____ Wednesday, February 29, 6-8 PM
_____ Thursday, February 9, 10 AM-12 NOON	_____ Thursday, March 1, 10 AM-12 NOON
_____ Friday, February 10, 10 AM-12 NOON	_____ Friday, March 2, 10 AM-12 NOON

INTRODUCTION TO THE 3270 PROTOCOL CONVERTER:

_____ Monday February 13, 11 AM-12 NOON	_____ Monday, March 5, 11 AM-12 NOON
_____ Tuesday, February 14, 3-4 PM	_____ Tuesday, March 6, 3-4 PM
_____ Thursday, February 16, 2-3 PM	_____ Thursday, March 8, 2-3 PM

INTRODUCTION TO VAX RUNOFF: _____ Wednesday, February 15, 1-2 PM
 _____ Friday, March 9, 1-2 PM

INTRODUCTION TO VAX DCL: _____ Friday, February 17, 1-2 PM
 _____ Wednesday, March 7, 1-2 PM

INTRODUCTION TO SPSS-X: _____ Monday/Wednesday, Feb. 20/22, 11-12 NOON
 _____ Tuesday/Thursday, March 13/15, 11-12 NOON

ADVANCED WATERLOO/SCRIPT: _____ Monday, February 20, 6-8 PM
 _____ Wednesday, March 14, 6-8 PM

INTRODUCTION TO WATERLOO/SCRIPT: _____ Tuesday/Thursday, Feb. 21/23, 10-11 AM
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 _____ Tuesday/Thursday, March 13/15, 10-11 AM

ADVANCED SAS: _____ Wednesday, February 22, 6-8 PM
 _____ Monday, March 12, 2-4 PM

PLEASE RETURN TO:

Academic Computing Services
The Computing Center
NT Box 13495
North Texas State University
Denton, TX 76203

GET A "SUBSCRIPTION" TO BENCHMARKS

BENCHMARKS is a vital link between the NTSU Computing Center and the users of our facilities. It is important for all users of the computing facilities to maintain a file of these newsletters because they contain materials which will periodically update existing documents as well as information and suggestions on uses of OS-MVS, MUSIC, the VAX 11/780s, the HP-2000, and other resources available to NTSU students and faculty. To facilitate the dispersal of BENCHMARKS, *** FREE *** subscriptions are now available. To receive yours, send the following information to us either by "snail mail" (the post office or campus mail) or electronically, through the MAIL facility on MUSIC.

Name _____

Mailing Address _____

PLEASE GIVE A CAMPUS ADDRESS (NOT BOX) IF POSSIBLE - It's Cheaper !

PLEASE RETURN TO:

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